

**REMARKS**

Claims 1-40 are all the claims pending in the application.

Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is submitted that the above self-explanatory amendments to the claims overcomes this rejection.

Claims 1-30 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (US 5,772,905) in view of Kim (US 5,064,597). Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (US 5,772,905) in view of Kim (US 5,064,597), as applied to claim 1 above, further in view of Zapka *et al.* (US 4,855,197). Claim 1 has been amended to recite a portion of the limitation of claim 5 and the entire limitation of claim 23. Claim 1 has also been amended to recite that the claimed process is for use in micro-devices and nano-devices. For the following reasons, Applicants respectfully traverse these rejections.

According to the amended process claim 1, the region of the die in which thermal energy is generated is in the form of a layer which remains for less than 25 seconds at a temperature greater than or equal to the glass transition temperature of the polymeric material.

The layer in which thermal energy is generated is thinner than the entire die and is kept at high temperature for a short span of time, so as the general advantages due to the generation of thermal energy upon dissipation of another form of energy in terms of absence of meaningful phenomena of thermal expansion/contraction, short transition process times and energy savings (see the last two paragraphs of page 4 and the first two paragraphs of page 5 of the description) are further emphasized.

The main reference, Chou, does not even hint at the possibility of heating only a layer of the mold for a short span of time, and even teaches away therefrom. It is indeed specified on col. 4, lines 65-66 of Chou that **the entire mold 10 (and not solely a part thereof, such as the layer 14 and the surface portion 16) is heated.** On the contrary, the assertion of the Examiner that col. 4, line 57- col. 5, line 14 of Chou "discloses the region of the die in which thermal energy is generated is in the form of a layer having a thickness ... " is deprived of any objective foundation.

The only other reference cited in the outstanding Office Action, Kim, is not even mentioned in respect of claim 23 as filed, so as it cannot a priori overcome the deficiencies of the main reference Chou in order to arrive at the present invention as recited in claim 1, it being noted that the limitation of claim 23 has been added to independent claim 1..

Additionally, Kim refers to mold structures for compression molding glass reinforced thermoplastics in view of the production of macro-articles such as "car hoods" (see col. 1, lines 18-29). On the contrary, the present invention relates to a lithographic process for use in micro-devices and nano-devices, namely to a technical field fully extraneous to the one of Kim. Hence, it is a priori questionable that the skilled in the art of the present invention may derive any teaching from Kim in order to "obviously" devise the latter.

The unobviousness of independent claim 1, as well as of all the remaining claims depending thereon, should thus be immediately apparent.

### ***Conclusion***

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

AMENDMENT UNDER 37 C.F.R. § 1.111  
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Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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